Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Misuse of Internet Protocol (IP) Captioned Telephone Service	)	CG Docket No. 13-24
	)	
	)	
Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities	)	CG Docket No. 03-123
	)	
	)	

To: The Commission

REPLY COMMENTS OF ULTRATEC, INC.

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Consumer & Regulatory Affairs
Ultratec, Inc.

October 16, 2018

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EXECUTIVE SUMMARY

Ultratec focuses these reply comments on several issues regarding which Ultratec, as an Internet Protocol-based captioned telephone service ("IP CTS") customer premises equipment ("CPE") manufacturer and technology company, can provide unique insight. Ultratec was the original inventor of captioned telephone service ("CTS"), two-line CTS, and IP CTS. Ultratec, along with its affiliate Captel Inc., has maintained its role as an industry leader as both an IP CTS CPE provider and IP CTS technology provider.

With respect to provider compensation, a price cap methodology would be an appropriate rate-setting mechanism to compensate IP CTS providers if the Commission ultimately determines to abandon the Multistate Average Rate Structure methodology, which has proven to be a stable and predictable method to establish IP CTS rates. However, establishing a rate methodology for IP CTS that exclusively uses automated speech recognition technology ("ASR IP CTS") to generate captions at this time would be premature. The comparative functional equivalence and usability of such a service are currently unknown due to the lack of Commission and industry experience with ASR IP CTS in a real-world setting. Until the Commission can define what standards and metrics such a service would need to meet, certifying ASR IP CTS providers or setting a rate methodology for IP CTS should be deferred.

Although Ultratec does not object to safeguards to protect the integrity of the Telecommunications Relay Services Fund, the record overwhelmingly demonstrates that growth in IP CTS use is caused by the needs of an increasingly aging U.S. population, rather than widespread waste, fraud, or abuse. Consequently, it would be inappropriate public policy to encumber IP CTS providers and their communications assistants with new and onerous

regulations to curtail waste, fraud, and abuse in the absence of any objective and definitive evidence of such waste, fraud, and abuse.

In addition, IP CTS user eligibility requirements must be sufficiently flexible to enable individuals who need IP CTS to use the service. The Commission should not adopt administrative barriers that would discourage functionally equivalent communication.

Finally, as the Commission previously has acknowledged, subcontractors have played a necessary and important role in the provision and evolution of IP CTS since it was initially developed. There is no justification to begin directly regulating, now for the first time, the myriad subcontractors used by IP CTS providers. The Commission should not interfere with the business judgments of IP CTS providers as to whether to self-provision or subcontract components and technologies used to provision IP CTS, including ASR IP CTS. It has adequate regulatory tools available to it in connection with its regulation of IP CTS providers, including newly adopted information submission obligations, to achieve its objectives.

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REPLY COMMENTS OF ULTRATEC, INC.

Ultratec, Inc. ("Ultratec")[1] submits these Reply Comments in response to the Further Notice of Proposed Rulemaking in the above-referenced proceeding ("*Further Notice*").[2] Ultratec offers this input in the instant proceeding as the most experienced PSTN and IP CTS technology company in the world, with over 17 years of experience providing CTS and IP CTS in four different countries.

Ultratec generally supports the Federal Communications Commission's ("Commission") continuing efforts to improve and protect IP CTS and the integrity of the Telecommunications

[1] Ultratec was the original inventor and remains an active innovator of captioned telephone services ("CTS") provided over the public switched telephone network ("PSTN"). Ultratec has maintained its role as an industry leader with respect to Internet Protocol-based CTS ("IP CTS") as a customer premises equipment ("CPE") manufacturer and technology provider. In addition, Ultratec's affiliate, CapTel, Inc. ("CapTel"), has over 17 years of experience providing CTS in four countries. Together, Ultratec and CapTel are the most experienced CTS and IP CTS companies in the world. *See* Ultratec, About Us, http://www.ultratec.com/about (last visited Oct. 16, 2018) and CapTel, http://www.captel.com (last visited Oct. 16, 2018).

[2] *Misuse of Internet Protocol (IP) Captioned Telephone Service, Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Report and Order, Declaratory Ruling, Further Notice of Proposed Rulemaking, and Notice of Inquiry, CG Docket Nos. 13-24 & 03-123, FCC 18-79 (rel. June 8, 2018) ("*Order*" or "*Further Notice*," as appropriate).

Relay Service ("TRS") Fund. In the *Order* accompanying the *Further Notice*, the Commission adopted rules to, among other things, prohibit unnecessary IP CTS use and collect more detailed information from IP CTS providers.[3] The *Further Notice* continues the Commission's reform efforts, proposing, among other things, changes to the Commission's rate methodology; safeguards to determine IP CTS eligibility, including repeat self-certification; requirements for provider communications; and new measures to prevent IP CTS waste, fraud, and abuse.[4] Ultratec focuses these reply comments on several issues regarding which Ultratec, as an IP CTS CPE manufacturer and technology provider, can provide unique insight.

First, Ultratec urges the Commission to adopt a price cap methodology should the agency ultimately determine to abandon the Multistate Average Rate Structure ("MARS") methodology, which has proven to be a stable and predictable method to establish IP CTS rates. Second, Ultratec agrees with the overwhelming view in the record that growth in IP CTS use is being caused by the increasing needs of the United States' aging population, rather than by waste, fraud, or abuse. Third, the Commission eligibility requirements should enable those who most benefit from IP CTS to access the service, rather than create barriers that discourage functionally equivalent communication. Finally, subcontractors play a necessary and important role in the provision of IP CTS that the Commission should not ignore or penalize.

I. IF THE COMMISSION DETERMINES TO ABANDON THE MARS METHODOLOGY, IT SHOULD ADOPT A PRICE CAP METHODOLOGY

The MARS methodology has proven over many years to be a stable and predictable means of establishing IP CTS rates. If, despite this, the Commission ultimately determines to replace MARS with a new and different rate methodology for IP CTS, the Commission should

[3] *Order* ¶¶ 36-47.

[4] *Further Notice*, Sections V.D-F.

adopt a price cap methodology. In addition, any rates that the Commission adopts in response to the *Further Notice* should apply only to Communications Assistant-assisted IP CTS ("CA-assisted IP CTS"), and should not apply to captioning that utilizes automated speech recognition ("ASR IP CTS"). It is simply too early to determine the correct rate methodology for ASR IP CTS when the definition, requirements, and metrics for such a service are as yet unknown.[5]

A. AFTER MARS, A PRICE CAP METHODOLOGY IS THE NEXT BEST ALTERNATIVE FOR ESTABLISHING A PERMANENT CA-ASSISTED IP CTS RATE

Ultratec continues to believe that the Commission should not abandon the highly successful MARS methodology for determining IP CTS rates.[6] Continued use of this methodology is supported by the same public interest rationale asserted by the Commission when the Commission adopted MARS—it accurately reflects the cost to provision IP CTS.[7]

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[5] Following the Commission's convention, Ultratec uses "ASR IP CTS" to mean "ASR alone, without CA participation." *Order* ¶ 13 n.41.

[6] *See* Comments of Sprint Corporation, CG Docket Nos. 13-24 & 03-123, at 4, 8-10 (filed Sept. 17, 2018) ("Sprint Comments"); Comments of Hamilton Relay, Inc., CG Docket Nos. 13-24 & 03-123, at 1-2 & nn.1-2 (filed Sept. 17, 2018) ("Hamilton Comments"). The MARS methodology has been widely supported by many parties to the proceeding over a number of years. *See* Comments of Sprint Corporation, CG Docket Nos. 10-51 & 03-123, at 2 (filed May 29, 2018); Comments of Sprint Corporation, CG Docket Nos. 10-51 & 03-123, at 2-3 (filed May 24, 2017); Comments of Hamilton Relay, Inc., CG Docket Nos. 10-51 & 03-123, at 2-3, 5-8 (filed May 24, 2017); Comments of Hamilton Relay, Inc., CG Docket Nos. 10-51 & 03-123, at 5-6 (filed May 24, 2016); Comments of Sorenson Communications, CG Docket Nos. 10-51 & 03-123, at 3 (filed May 24, 2016); Reply Comments of Ultratec, Inc. CG Docket Nos. 10-51 & 03-123, at 2-4 (filed June 11, 2015); Comments of Hamilton Relay, Inc., CG Docket Nos. 10-51 & 03-123, at 4-8 (filed June 4, 2015).

[7] *See Telecommunications Relay Services and Speech-to-Speech Services for Individuals with hearing and Speech Disabilities*, Report and Order and Declaratory Ruling, 22 FCC Rcd 20140, 20157 ¶ 35 (2007) (MARS "result[s] in a rate that reflects the reasonable costs of providing service based on the rates states pay through competitive bidding for the same, *albeit* intrastate, service" and "avoids the necessity of detailed analysis (and possible disallowance) of the projected cost and demand data for each provider, as such data will no longer be required to be filed by the providers of these services.") (citations omitted); *see also* Sprint Comments at 4 (explaining that the "MARS methodology has produced rates that accurately reflect the actual costs" of service).

If, however, the Commission ultimately decides to replace MARS with another rate methodology, the Commission should adopt a price cap approach to rate setting. As demonstrated by initial comments in this proceeding, a price cap approach will encourage a more competitive, efficient, stable, and predictable IP CTS market than the other rate setting mechanisms that the Commission has considered.[8] Adopting a price cap methodology would incentivize providers to seek and implement cost savings measures and technologies to increase economic efficiency in the provision of IP CTS over time, which in turn will enable the providers to at least maintain fair and reasonable profits.[9] This aligns with the Commission's goal of adopting an approach that ensures IP CTS is provided "in the most efficient manner."[10] Indeed, the Commission itself has recognized that price caps create incentives that "mirror the incentives for efficiency found in competitive markets" and lead to a reduction in costs and greater innovation.[11] Specifically, under a price cap approach, each provider will be able to decide how to best allocate resources, weighing profitability against investments in research and development and other service improvements. Moreover, a price cap methodology also requires less administrative oversight and accounting review by Commission staff than a cost-based methodology in which rates are re-calculated year-to-year based on Commission review of the costs of providing IP CTS.[12]

[8] *See* Hamilton Comments at 3-4; Comments of CaptionCall, CG Docket Nos. 13-24 & 03-123, at 61 (filed Sept. 17, 2018) ("CaptionCall Comments").

[9] Hamilton Comments at 4.

[10] *Further Notice* ¶ 94.

[11] CaptionCall Comments at 61 (citing *Regulatory Reform for Local Exchange Carriers Subject to Rate of Return Regulation*, Order on Reconsideration, 12 FCC Rcd 2259 ¶ 5 n.20 (1997)).

[12] CaptionCall Comments at 62-64.

If the Commission pursues a price cap approach to IP CTS rate setting, it should set the initial starting rate at $1.7630 per minute or greater, as proposed by Hamilton.[13] This amount represents the IP CTS rate adopted for the 2011-2012 funding year, which was not challenged as being unreasonable by the Commission or other parties to the proceeding.[14] Adoption of a rate lower than $1.7630 could drive providers to exit the marketplace or significantly disincentivize new marketplace entrants.[15]

B. THE COMMISSION SHOULD NOT UTILIZE A REVERSE AUCTION TO ESTABLISH FUTURE IP CTS RATES

Counter to the suggestions made by some commenters, the Commission should not conduct a reverse auction to set IP CTS rates going forward.[16] As the Commission concluded when setting interim rates in the *Order*, there is simply "no basis to defer consideration of rate changes for the period of time that would be necessary to consider, adopt, and implement a new market-based approach."[17] Contrary to the Commission's emphasis on providing the IP CTS industry with visibility regarding new rates in the short term, the development and implementation of a reverse auction to establish new IP CTS rates likely would take more than a year and could take as long as several years, especially given the significant number of spectrum and universal service-related auctions that the Commission intends to conduct going forward.

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[13] Hamilton Comments at 4.

[14] *Id*.

[15] *See, e.g.*, Comments of MezmoCorp (dba InnoCaptions), CG Docket Nos. 13-24 & 03-123, at 2-3 (filed Sept. 17, 2018) (noting that InnoCaptions "is hesitant to expand" in anticipation of the "impending rate decrease by another 10% to $1.58 for 2019-2020").

[16] *See generally* Comments of Sorenson Communications, CG Docket Nos. 10-51 & 03-123 (filed May 24, 2017) (encouraging the Commission to seek comment on potential market-based solutions); CaptionCall Comments at 72-77.

[17] *Order* ¶ 29 & n.100.

Further, the Commission has expressly acknowledged that there is evidence that a reverse auction approach to TRS rate setting could actually harm competition by either "setting a single rate so low as to preclude effective competition" or "setting it so high as to provide wasteful, windfall profits to the lowest-cost provider."[18] Specifically, because there would be no guarantee of serving a fixed number of minutes, each provider's bid would likely be based on currently served minutes and costs.[19] There are no analogous auctions that could be used as models for successful implementation of a reverse auction,[20] and no evidence that an IP CTS auction would be the first success or achieve the desired results. For the same reasons that the Commission has rejected reverse auctions to establish TRS rates in the VRS context, it should do so here.

C. IT IS PREMATURE TO ESTABLISH A RATE SETTING METHODOLOGY FOR ASR

In the *Further Notice*, the Commission seeks comment on setting a compensation rate for IP CTS calls relayed using ASR and whether it should set separate compensation rates for ASR IP CTS and CA-assisted IP CTS.[21] Due to the current nascent state of ASR technology and the lack of adequate experience at this stage regarding the provision of IP CTS using ASR, it is premature for the Commission to establish a rate method for ASR IP CTS at this time.[22] Doing

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[18] *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Report and Order and Order, 32 FCC Rcd 5891, 5914 ¶ 46 (2017) ("*2017 VRS Order*") (stating in the VRS context, "while Sorenson argues that a reverse auction would promote competition, encourage greater efficiencies, and provide stability, it seems equally or more likely to have the opposite effect").

[19] *Id*.

[20] *2017 VRS Order* at 5915 ¶ 46.

[21] *Further Notice* ¶ 96.

[22] *See* Comments of the Hearing Loss Association of America, et al., CG Docket Nos. 13-24 & 03-123, at 19, 27 (filed Sept. 17, 2018) ("HLAA Comments"); Hamilton Comments at 23-24; Sprint Comments at 8 & n.14; Comments of ClearCaptions, CG Docket Nos. 13-24 & 03-123, at 18, 22 (filed Sept. 17, 2018) ("ClearCaptions Comments") (stating "because the operating costs

otherwise would, as Commissioner Jessica Rosenworcel notes, be putting the "cart before the horse."[23] Instead, the Commission should wait until the factual record regarding the use of ASR to provide IP CTS is better developed before further evaluating the methodology that should be used to set ASR IP CTS rates.

Ultratec and the rest of the IP CTS community are excited about any technological advancements that have the real potential to improve IP CTS, including by increasing the efficiency with which IP CTS can be provided.[24] But ASR technology may not yet be adequately advanced to enable an IP CTS offering to be provided solely through the use of ASR that is equivalent or better than that available from CA-assisted IP CTS service.[25] To date, no fully functional, real-world IP CTS offering has relied exclusively on ASR for captioning, and it is clear to Ultratec, based on its extensive experience testing ASR technologies, that ASR is not yet up to the task. Additional time is needed to enable users to provide feedback regarding the effectiveness of ASR technology in a real-world IP CTS environment and for adequate testing of such ASR technology to show conclusively that the captions generated by ASR IP CTS are as reliable and accurate as those done by CA-assisted IP CTS.

Even those vendors that most strongly support the use of ASR-only technology have acknowledged that it is not, standing alone, adequate for emergency situations, such as 911

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of ASR are not yet known, ClearCaptions would oppose any permanent rate for ASR at this time").

[23] *See Order and Further Notice* (Concurring Statement of Jessica Rosenworcel, Commissioner), available at https://www.fcc.gov/document/fcc-acts-reform-internet-protocol-captioned-telephone-service/rosenworcel-statement.

[24] *Further Notice* ¶¶ 180-81.

[25] *Order* ¶¶ 49-51.

calls.[26] If ASR IP CTS is not yet adequate to caption 911 calls, then it also is not adequate for the myriad of other types of critical day-to-day communications that are relayed via IP CTS but that do not require 911 intervention. It is equally important that call participants are able to fully understand the entire conversation with certainty and accuracy when discussing medical conditions with their doctors and legal matters with their lawyers, as well as who will be responsible for picking up the children after school.[27] Failed communication in these and many other contexts can lead to disastrous or even life-threatening outcomes. Moreover, it is impossible for a provider to know the content of a call before it is made. Therefore, there is no way for a provider to assign CAs to the critical calls, while using ASR for other, less critical communications.

Until ASR can be proven to be as good as or better than CA-assisted captions, both through a scientific statistical analysis but also through actual user adoption, the true costs of providing a safe, reliable, and user-acceptable ASR IP CTS offering will remain unknown. Accordingly, it is premature to seek comment on how to properly compensate future ASR providers. Instead, the Commission at this time should further develop appropriate means of evaluating ASR IP CTS offerings to ensure that they are capable of providing captions at least as accurate as those provided by CA-assisted IP CTS to those individuals that rely on IP CTS—for both day-to-day and emergency communications. Only after the Commission has a clear understanding of whether, and, if so, how, ASR IP CTS can be safely and reliably implemented

[26] Letter from Erik Strand, MachineGenius, Inc., to Marlene Dortch, Secretary, FCC, CG Docket Nos. 13-24 & 03-123, at 7-8 (filed May 30, 2018).

[27] *See* HLAA Comments at 27 (stating consumers should be able to rely on IP CTS for "accurate, complete, and understandable text display of what was said").

should the Commission consider certifying ASR IP CTS providers or determining the best approach to rate setting for ASR IP CTS.

II. AN AGING POPULATION AND INCREASED AWARENESS OF IP CTS ARE RESPONSIBLE FOR ITS GROWTH

In the *Further Notice*, the Commission acknowledges that IP CTS demand has "exploded from approximately 29 million minutes in 2011 to 362 million minutes in 2017." However, the Commission incorrectly asserts this growth in usage is likely exacerbated by the lack of "complete and objective" user need assessments.[28] Instead, the record overwhelmingly demonstrates that the needs of an increasing aging population, rather than waste, fraud, or abuse are, driving growth in IP CTS use.[29] The U.S. population is aging at an unprecedented rate. By 2035, there will be as many as 78 million Americans over the age of 65, compared to approximately 49 million Americans in 2016.[30] At the same time, life expectancy has increased significantly as a result of more advanced medicine. As a result of these demographic changes, America's population in legitimate need of IP CTS has substantially expanded and will only continue to grow over time.[31]

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[28] *Further Notice* ¶¶ 68, 117. However, there is no evidence that individuals are being certified to use IP CTS in exchange for "kick-backs or other incentives." *See* Comments of American Speech-Language-Hearing Association, CG Docket Nos. 13-24 & 03-123, at 2-3 (filed Sept. 14, 2018) ("ASHA Comments"); *see also* Comments of the American Academy of Audiology, CG Docket Nos. 13-24 & 03-123, at 4 (filed Sept. 7, 2018) ("it is our experience that audiologists typically receive no compensation, direct or indirect, for IP CTS authorizations") ("AAA Comments").

[29] *See generally* ASHA Comments at 2; Sprint Comments at 5-7; Hamilton Comments at 16-17; HLAA Comments at iv.

[30] Jonathan Vespa, *The Graying of America: More Older Adults Than Kids by 2035*, U.S. Census Bureau (Mar. 13, 2018), https://www.census.gov/library/stories/2018/03/graying-america.html.

[31] Sprint Comments at 6 ("[T]he number of individuals with hearing loss will only increase as the U.S. population as a whole ages. Consequently, the legitimate demand for IP CTS similarly will

Also contributing to the increased usage of IP CTS is the public's increased awareness of the service.[32] As Sprint observed, the deaf and hard-of-hearing community previously was often underserved and unaware of IP CTS technologies because providers' marketing efforts tended to solely target the deaf community.[33] However, providers more recently have launched many new campaigns to inform both communities about IP CTS and its benefits, leading more people to finally gain access to the services they need. And there are still many eligible consumers who are unaware of the service.[34] As outreach continues, this may contribute to further growth of IP CTS usage. But such increasing usage should not be interpreted by the Commission as evidence of waste, fraud, and abuse. Instead, it should be embraced for what it is—an increase in the number of deaf and hard-of-hearing Americans experiencing functionally equivalent communications for the first time. IP CTS has proven to be a very effective and widely accepted way for persons with hearing loss to use the telephone in a functionally equivalent manner. Its growth should be heralded as evidence of its usefulness to the deaf and hard-of-hearing community.

In light of the lack of documented objective evidence of waste, fraud, and abuse, the Commission should not impose requirements that "enable or require CAs to flag individual calls that may suggest that IP CTS functionality is being used improperly."[35] Such a requirement would unreasonably and unfairly require CAs to continually make individual judgements about the qualifications and intentions of the users whose communications they are relaying, which

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continue to grow over time, and users will increasingly be elderly individuals who are unfamiliar with accessibility technologies.") (citation omitted).

[32] *Id*. at 7.

[33] *Id*.

[34] HLAA Comments at 29.

[35] *Further Notice* ¶ 152.

would, in turn, entirely undermine the benefits of IP CTS.[36] It would be impossible for a CA to both police whether IP CTS functionality is being used improperly and to continue to caption calls in a neutral and objective manner. Further, CAs lack training that would make them the capable of detecting improper use without also regularly flagging false positives.[37] Consequently, CAs should not be obligated to assume the conflicting responsibilities of monitoring and judging a call's content while remaining a neutral communications facilitator with confidentiality and consumer privacy obligations.[38] Moreover, if users understood that CAs were obligated to evaluate each user communication in an effort to identify individual instances of potentially impermissible IP CTS usage, this would jeopardize consumers' understanding that a CA's sole function is to facilitate a call, and, as a result, it may undermine consumers' reliance on the service.[39] For these reasons, the Commission should decline to adopt such a requirement.

III. IP CTS ELIGIBILITY REQUIREMENTS SHOULD NEVER CREATE BARRIERS TO FUNCTIONALLY EQUIVALENT COMMUNICATIONS

Any eligibility requirement must be sufficiently flexible to ensure that all individuals who need IP CTS to achieve functionally equivalent communications have access to IP CTS. Ultratec agrees with the Consumer Groups representing current and potential IP CTS users that "[a]n aging, technologically-literate population is the driving factor" increasing overall IP CTS usage,

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[36] *See* ClearCaptions Comments at 40; CaptionCall Comments at 56.

[37] Moreover, fraudulent calls are not likely to be able to be identified by an ASR IP CTS system, and it would make little sense to attempt to impose some type of call monitoring obligation on ASR IP CTS providers. Consequently, imposing a monitoring function on CAs would unfairly subject CA-assisted IP CTS to a greater regulatory burden than ASR IP CTS.

[38] *Order* ¶ 63 (observing that one of the Commission's mandatory minimum standards for functional equivalency is "confidentiality of IP CTS calls").

[39] Although requiring CAs to monitor the contents of calls is problematic generally, such a requirements would be particularly troublesome in the context of calls between users and their attorneys or medical providers. *See* CaptionCall Comments at 57-58.

"not an overly relaxed eligibility framework."[40] Even so, if the Commission ultimately determines to impose formal eligibility requirements, such requirement must (1) not impose an undue burden on individuals who would benefit from IP CTS and (2) include sufficient methods of demonstrating eligibility that individuals in need of IP CTS are never foreclosed from accessing the service.

A. ELIGIBILITY CANNOT BE SO BURDENSOME AS TO FORECLOSE INDIVIDUALS FROM ACCESSING FUNCTIONALLY EQUIVALENT SERVICE THROUGH IP CTS

Any eligibility requirements for IP CTS, either for initial certification or continued use of the service, must not be so onerous as to jeopardize the ability of users to obtain functionally equivalent communications through IP CTS.[41] Indeed, "imposing a burdensome eligibility regime risks precluding legitimate users from IP CTS's profound benefits."[42] It is critical that the Commission "not impose 'roadblocks' to the receipt of IP CTS service or otherwise make the assessment process more difficult for the vulnerable IP CTS user population."[43]

The Commission's proposal to require IP CTS providers to obtain biennial self-certifications from users to demonstrate "their continuing need to use IP CTS to achieve functionally equivalent telephone communication" is one such roadblock.[44] A biennial requirement is especially inappropriate because the "hearing loss leading to the need for IP CTS

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[40] HLAA Comments at 11.

[41] *See generally Further Notice* ¶¶ 117-38 (seeking comment on the costs and benefits of various ways to assess IP CTS user eligibility); HLAA Comments at 12 ("[I]t is critical that the Commission not impose additional barriers on IP CTS users that are not imposed on users of other TRS services. This disparate treatment amounts to discrimination that violates the letter and spirit of the ADA.").

[42] HLAA Comments at iv.

[43] Sprint Comments at 25.

[44] *Further Notice* ¶ 146.

rarely reverses itself."[45] Accordingly, adopting a recertification requirement is not only "an undue and illogical burden on consumers,"[46] but also "is not functionally equivalent to a hearing user's ability to use telecommunications services."[47] Further, elderly users, wary of fraud schemes targeting seniors,[48] may be reluctant to supply IP CTS providers with personal information required to recertify for a service they already have and use. Thus, a rational choice to refrain from disclosing certain sensitive information could result in shutting off a needed communications aid. In short, "the Commission must ensure that any [new] rule … does not place an undue burden on consumers or deter legitimate use, which would risk violating the right of consumers who are hard of hearing, deaf, or DeafBlind to equal access to communications technology."[49] A biennial self-certification requirement does not meet this test.

B. ELIGIBILITY SHOULD NOT BE RESTRICTED TO A SINGLE ASSESSMENT MEASURE

Ultratec agrees that "[h]earing loss or other medical issues that require access to IP CTS services are extremely complex." Therefore, any required assessment measures must offer sufficient flexibility to assure that potential IP CTS users are able to secure access to IP CTS to fulfill their communications needs.[50] As explained by the American Academy of Audiology:

> The ability to successfully communicate by phone is affected by external and internal factors. External factors include (but are not limited to) such things as the bandwidth of the device (i.e., range of audio frequencies transmitted; phones are known to transmit

[45] HLAA Comments at v.

[46] *Id*. at 26.

[47] Sprint Comments at 27.

[48] *See Further Notice* ¶ 139 (noting that older citizens "may be particularly vulnerable to schemes that could result in fraud and abuse").

[49] HLAA Comments at v.

[50] ClearCaptions at 29.

> only up to 3000 Hz even though human speech contains salient information up to 8000 Hz), intensity level of the [spoken] phone signal, device fidelity (i.e., the presence of distortion), presence of environmental and background noise at the transmitting and/or receiving ends of the communication, and the lack of visual cues. Internal factors include (but are not limited to) such things as the individual's age, hearing ability (i.e., how loud sounds must be in order for the person to hear them, as reflected in an audiogram), speech understanding ability in quiet and noise, cognitive capacity, and comorbidities. These external and internal factors typically have a compounding effect – i.e., the likelihood of successful phone communication decreases as the number of interfering factors increases.[51]

Eligibility assessments must consider the "wide range of issues affecting an individual's ability to utilize the telephone."[52] Given the many factors affecting communication by phone, eligibility criteria based exclusively on tests designed to measure one or more "functional aspects of phone communications … will be too restrictive and may not adequately represent the individual's real-world experience."[53] Accordingly, the Commission should not adopt one sole measurement of hearing loss, especially one based on specific functional assessments, but "permit[] other means of determining candidacy for and benefit from captioned phones."[54]

C. USERS SHOULD BE ABLE TO QUALIFY FOR ACCESS TO IP CTS THROUGH BOTH SELF-CERTIFICATION AND CERTIFICATION BY HEARING HEALTH PROFESSIONALS

The Commission should continue to allow potential IP CTS users to self-certify eligibility through market-priced equipment purchases, as well as to obtain eligibility certification from hearing health professionals ("HHPs"). Both mechanisms are adequate to

[51] AAA Comments at 2-3.

[52] ClearCaptions at 29.

[53] AAA Comments at 3-4 ("it would be too restrictive to exclusively depend on metrics of hearing loss and speech understanding in [IP CTS] assessments").

[54] *Id*. at 5.

ensure that users have an actual need for IP CTS and to prevent any significant amount of waste, fraud, and abuse. By contrast, this role should not exclusively be imposed on state agencies.

As an initial matter, states should not be the sole arbiter of whether an individual is eligible to use IP CTS.[55] Sprint correctly observes that "[w]hile the states and U.S. territories with FCC-certified TRS programs should and currently do play an important role in administering IP CTS, state entities should not be the exclusive IP CTS assessment provider."[56] Accordingly, although there is no disadvantage to allowing state agencies to qualify potential users as eligible for IP CTS, other mechanisms for eligibility determinations also must be available to users.

HHP certifications are an effective means of demonstrating eligibility. They are "reliable, knowledgeable, ethical, and objective certifiers of potential IP CTS users."[57] Even absent a legal requirement, many IP CTS providers have been using third-party HHP certifications to responsibly determine user eligibility for some time, and the Commission should allow such HHP third-party certifications to continue going forward. Further, any concern by the Commission that HHPs may not qualify as independent, objective, and disinterested third parties seems misplaced. They are subject to "professional and ethical obligations that are required by state licensure and a code of ethics prescribed by membership in a national organization."[58] In addition, the most commonly used IP CTS provider forms already require an audiologist to attest that he or she is truly a third party, without a business, family, or social relationship with an IP

[55] *Further Notice* ¶ 123.

[56] Sprint Comments at 23.

[57] *Id*. at 25.

[58] *Id*. at 5, 25 ("HHPs are guided by a code of ethics as healthcare professionals and have self-regulatory bodies to ensure compliance").

CTS provider.[59] Finally, Ultratec agrees with the Consumer Groups that "[i]f a third-party eligibility regime is adopted, the Commission should not overly limit the type of medical professionals who can provide IP CTS certification."[60]

In addition to state agency and HHP certifications, the Commission also should allow users to self-certify that they require IP CTS by demonstrating their need through the purchase of an IP CTS device at a market-based rate. The record overwhelmingly agrees that self-certification is the "golden rule" for potential IP CTS users.[61] The Consumer Groups correctly observed that "self-certification enables individuals who need and will immediately benefit from this service to receive it without a separate, administrative trip to their hearing health professional."[62] Self-certification provides individuals that may live in rural areas far away from HHPs or individuals who are "elderly and may also have mobility or other disabilities" a crucial alternative to third-party assessments.[63] The Commission's conclusion that "where consumers must make an investment in an IP CTS equipment purchase, they are far less likely to acquire such equipment if they do not need the service" continues to be accurate.[64] A market survey

[59] *See* AAA Comments at 4-5 (citing the Hamilton and CaptionCall certification forms).

[60] HLAA at 13; *see also* Hamilton Comments at 20 (urging the Commission to find that other health professions that are "qualified to evaluate an individual's hearing loss in accordance with applicable professional standards" be allowed to issue third-party certifications).

[61] ClearCaptions Comments at 26; *see also* Hamilton Comments at 20 ("Hamilton continues to believe that users should be given the option to pay $75 or more for the IP CTS phone and to self-certify without the need for a third party certification."); HLAA Comments at 11 (calling self-certification "the ideal method to identify users").

[62] HLAA at 9-10.

[63] *Id*. at 10.

[64] *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Report and Order and Notice of Proposed Rulemaking, 28 FCC Rcd 13420, 13440 ¶ 41 (2013).

could be conducted to determine a reasonable, justifiable amount that an individual must pay for an IP CTS device prior to certification.

IV. THE COMMISSION SHOULD NOT REGULATE IP CTS PROVIDERS' USE OF SUBCONTRACTORS

Subcontractors play a necessary role in the provision of IP CTS that the Commission should not ignore or penalize. They are utilized throughout the vertical IP CTS supply chain to supply a myriad of services, including CA services (many CAs are independent contractors), platform hosting services, software and other technology licensing, and even basic workplace administrative functions. Each IP CTS provider makes independent financial and operational determinations regarding which components of operating a certificated IP CTS business the provider will handle in-house and which it will outsource. The Commission should not second guess these fundamental business determinations. Further, ASR IP CTS will only increase—not decrease—provider reliance on subcontractors and technology licenses. Moreover, if the Commission adopts a price-cap methodology to establish IP CTS rates, there would be no reason for the Commission to expend resources to assess the "reasonableness" of providers' subcontractor costs.[65]

A. THE COMMISSION SHOULD NOT ATTEMPT TO DIRECTLY REGULATE IP CTS PROVIDERS' SUBCONTRACTORS

IP CTS providers have long utilized subcontractors to provide relay service in a responsible, auditable, and economically efficient way. Since the Commission originally authorized CTS and then IP CTS, the Commission has recognized that subcontractors have been employed by IP CTS providers to supply some of the primary technologies used to generate

[65] *Further Notice* ¶¶ 71-76 (seeking comment on subcontractor expenses and licensing fees in the context of determining IP CTS providers' "'reasonable costs' that TRS providers are permitted to recover from the TRS Fund").

captions.[66] Despite these broadly acknowledged relationships, the Commission has not previously attempted to intervene in the business judgement used by IP CTS providers to determine what aspects of their IP CTS offering to subcontract. Instead, for the past decade, the Commission has directly regulated IP CTS providers, and the providers have affirmatively submitted themselves to the Commission's TRS rules and oversight.[67] For example, the TRS Fund Administrator audits IP CTS providers on annual basis, and the Commission may also independently audit providers.[68] Given this level of regulation and active oversight of certificated providers, there is no reason for the Commission now, for the first time, to attempt to directly impose new requirements on IP CTS providers' subcontractors.[69] Any oversight of IP CTS that the Commission deems appropriate can be undertaken through the historically pervasive direct regulation of IP CTS providers and the enforcement of those regulations.

For example, the Commission recently adopted new cost collection and audit rules. It should now "evaluate the efficacy" of these rules before seeking to impose information submission requirements on third-party subcontractors that do not directly receive TRS fund allocations.[70] Specifically, the Commission recently empowered the TRS Fund Administrator and the Office of Inspector General to obtain detailed cost information from providers.[71] Likewise, the recent *Order* requires IP CTS providers to "make available any relevant

[66] *See id*. ¶ 74.

[67] In contrast, subcontractors have not affirmatively submitted to the FCC's regulatory authority in their roles as IP CTS subcontractors. *See id.* ¶ 73 (asking whether the Commission has the authority to require subcontractors to submit their costs to the TRS Fund Administrator).

[68] 47 C.F.R. § 64.604(c)(5)(iii)(D)(6).

[69] *Further Notice* ¶ 73 (seeking comment on whether a subcontractor should be "deemed" a TRS provider).

[70] *See* Hamilton Comments at 15.

[71] *Order* ¶¶ 36-37.

documentation" including those "directly related to the provision of IP CTS."[72] Prior to "adopting potentially duplicative or unnecessary new rules in this rulemaking," the Commission should allow these new rules to become effective and should gain adequate experience utilizing these regulatory tools before seeking to further extend its IP CTS regulatory framework to subcontractors.[73]

Moreover, any attempt to regulate providers' subcontractors would be unworkable. The general term "subcontractors" is overly broad and would apply to numerous companies relied upon by IP CTS providers, including their ISPs, platform and data hosting vendors, telephone and broadband service vendors, technology and software licensors and consultants, and vendors and independent contractors that provide personnel services such as CAs. To directly regulate IP CTS providers' vendors, the Commission would have to undertake a nuanced line-drawing exercise to specify which such subcontractors would be newly subject to Commission regulation and which would not. In addition, any attempt to regulate subcontractors has the potential to significantly increase the costs to subcontractors of providing services to IP CTS providers, which, in turn, will increase the IP CTS providers' costs.

ASR IP CTS provides an excellent example of the problems that would be associated with attempting to regulate IP CTS providers' subcontractors. ASR IP CTS providers necessarily will incorporate third-party, commercial ASR technology into ASR IP CTS offerings, rather than undertaking the exorbitantly costly process of developing their own ASR technology. Further, the licensing fees for ASR technologies could comprise a significant portion of ASR IP CTS providers' costs. Consequently, if the Commission determined to directly regulate IP CTS

[72] *Id*. ¶ 37. *See also* 47 C.F.R. § 64.604(c)(5)(iii)(D)(6).

[73] Hamilton Comments at 15.

providers' subcontractors, ASR technology companies would likely be one of the primary recipients of such regulation. But imposing a new regulatory framework on ASR is likely to chill the further development of ASR technology and reduce the incentive for ASR companies to work with IP CTS providers. This will directly and meaningfully hamper the further evolution of ASR IP CTS.

B. PROVIDERS' USE OF SUBCONTRACTORS WILL NOT AFFECT TRS FUND DISTRIBUTIONS IN CONNECTION WITH IP CTS IF THE COMMISSION ADOPTS A PRICE CAP RATE SETTING METHODOLOGY

If the Commission adopts a price cap methodology to set IP CTS rates, the amount paid by IP CTS providers to their subcontractors going forward will have no effect on the amount of TRS Fund revenue allocated to IP CTS. The amount of reimbursement allocated to an IP CTS provider will be based solely on the number of minutes of captioning conducted by the provider. It will not be affected by the provider's business decisions regarding whether to self-provision all components of its IP CTS offering, and thus retain all of its TRS reimbursement, or instead subcontracts portions of its service and pay subcontractors accordingly. This being the case, the Commission should not attempt to dictate to IP CTS providers how they should manage their contractual arrangements with subcontractors. IP CTS providers are economically sophisticated actors, and the Commission should not substitute its judgement for that of IP CTS providers when determining the best and more efficient way to provide IP CTS to users, especially if these provide business judgements do not affect the size of the TRS fund.

V. CONCLUSION

For the reasons stated herein, the Commission should adopt a price cap IP CTS rate-setting methodology if it determines to abandon the MARS methodology. The Commission also should adopt flexible eligibility requirements that enable individuals who need IP CTS to access and use the service free of unnecessary encumbrances, rather creating administrative barriers to

functionally equivalent communications. The Commission should set the requirements and metrics for ASR IP CTS so that it meets or exceeds the accuracy, dependability, and functional equivalence of CA-assisted IP CTS. Only after this is done should the Commission certify ASR IP CTS providers and establish a rate setting methodology for ASR IP CTS. Finally, the Commission should refrain from extending a new regulatory framework to IP CTS providers' subcontractors.

Respectfully submitted,

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